CLAIMS

1. An electrical connector including a plug connector and a receptacle connector detachably fitted with each other,
said plug connector comprising a plurality of coaxial cables each having a center conductor, an insulator covering said center conductor, a braid as an external conductor covering said insulator, and a sheath covering said braid; a flexible printed circuit board having lands each connected to said center conductor of the coaxial cable and land portions to which a ground bar is connected; and said ground bar having a main portion adapted to contact said braids and fixed portions each positioned contiguously with said main portion and connected to said land portion.

2. The electrical connector as set forth in claim 1 wherein said receptacle connector comprises a housing, contacts, locking lever, and a receptacle shell covering said housing except for its portion associated with said locking lever, and said receptacle shell is provided on the side of a fitting opening with at least one contacting means adapted to contact the upper surface of said ground bar of the plug connector.

3. The electrical connector as set forth in claim 1 or 2 wherein said ground bar of the plug connector is provided with projection pieces which extend from the main portion of the ground bar and is adapted to contact the braids at locations between said center conductors of all the coaxial cables or at locations between said center conductors of every other coaxial cable.

4. The electrical connector as set forth in claim 1 or 2 wherein said ground bar of the plug connector is provided with projection pieces which extend from the main portion of the ground bar and is adapted to contact the braids at intervals of plural locations between said coaxial cables.

5. The electrical connector as set forth in claim 3 or 4 wherein said projection pieces are in the form of a substantially L-shape.

6. The electrical connector as set forth in claim 5 wherein said projection pieces in the form of the substantially L-shape located at intervals of plural locations extend beyond the braids and fixed to said flexible printed circuit board by soldering.

7. The electrical connector as set forth in any one of claims 1 to 6 wherein the contacts at both the ends of said receptacle connector are each connected to said land portion.

8. The electrical connector as set forth in claim 2 wherein each of said contacts of said receptacle connector comprises a contact portion, a connection portion, an elastic portion and a fulcrum portion provided between said contact portion and said connection portion, a pressure receiving portion positioned opposed to said connection portion and extending from said elastic portion, and an extension portion having a further contact portion on the opposite side of the first mentioned contact portion, and the first mentioned contact portion, said elastic portion, said fulcrum portion and said connection portion being arranged in the form of a crank, and wherein said locking lever of said receptacle connector is provided with urging portions successively in its longitudinal direction, and said locking lever is installed in said housing so that said urging portions are each pivotally movable in the space between the connection portion and the pressure receiving portion of said contact.

9. The electrical connector as set forth in claim 8 wherein said receptacle connector is provided with locking members in the same construction as that of said contacts, and said flexible printed circuit board is provided with anchoring portions each at position corresponding to engaging portion of said locking member.

10. The electrical connector as set forth in claim 2 wherein as said contact means of the receptacle shell there is provided a protrusion extending into said fitting opening or an elastic piece having an elasticity extending into said fitting hole.

11. The electric connector as set forth in claim 9 wherein the plug connector and the receptacle connector are provided with necessary number of locking members in accordance with a required suspension force of the connectors.

12. The electrical connector as set forth in claim 3 or 4 wherein said ground bar is provided with protrusion pieces contiguously with said main portion of the ground bar at predetermined positions on the surface to contact

the coaxial cables so that said protrusion pieces are each adapted to pierce into the coaxial cable, thereby causing each the protrusion piece to contact the center conductor and the braid of the coaxial cable.

13. The electrical connector as set forth in claim 12 wherein said protrusion pieces of the ground bar are so arranged that they pierce every other or every third coaxial cable.

14. The electrical connector as set forth in claim 1 wherein said ground bar of the plug connector is provided at said fixed portions with protrusion portions adapted to abut against flat portions of a housing of said receptacle connector when one of the plug and receptacle connectors being turned upside down relative to the other is being fitted with each other, thereby preventing erroneous insertion of the plug connector into the receptacle connector.

15. The electrical connector as set forth in claim 14 wherein said protrusion portions are in the form of a substantially L-shape.